UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/573,978	11/17/2006	Eral Foxenland	PS02 0303US2	4161

58561   7590   09/16/2009
HARRITY & HARRITY, LLP
11350 RANDOM HILLS ROAD
SUITE 600
FAIRFAX, VA 22030

EXAMINER
TREAT, WILLIAM M

ART UNIT	PAPER NUMBER
2181	

MAIL DATE	DELIVERY MODE
09/16/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/573,978	FOXENLAND, ERAL
Office Action Summary	Examiner	Art Unit	
	William M. Treat	2181	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>08 June 2009</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-22</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-22</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage

        application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

1.   Claims 1-22 are presented for examination.

2.   In view of the Appeal Brief filed on 6/13/2008, PROSECUTION IS HEREBY

REOPENED. New grounds of rejection are set forth below.

        To avoid abandonment of the application, appellant must exercise one of the

following two options:

        (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply

under 37 CFR 1.113 (if this Office action is final); or,

        (2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed

by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and

appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth

in 37 CFR 41.20 have been increased since they were previously paid, then appellant

must pay the difference between the increased fees and the amount previously paid.

        A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by

signing below:

        /Alford W. Kindred/

        Supervisory Patent Examiner, Art Unit 2181

        .

3.   35 U.S.C. 101 reads as follows:

        Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
        matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
        conditions and requirements of this title.

4.   Claim 18 is rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter.

5.   Claim 18 is for a computer program on a computer readable storage medium

where the instructions of the program are not executed on a machine/computer, etc.

The existence of computers which perform optical character recognition means

applicant's invention need be nothing more than a printout of a computer program.

Applicant's statement that the "instructions" of the program/method "when executed"

can perform certain acts is merely the recitation of a quality of any well-written program,

whether in a book or some other form of storage (i.e., computers do what computer

program instructions tell them to do as they are executed). A program is the subject of

copyright law and not patent law unless it is stored on a computer readable medium

which forms part of a processing system which is actually executing the program.

6.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

7.   Where applicant acts as his or her own lexicographer to specifically define a term

of a claim contrary to its ordinary meaning, the written description must clearly redefine

the claim term and set forth the uncommon definition so as to put one reasonably skilled

in the art on notice that the applicant intended to so redefine that claim term. *Process

Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed.

Cir. 1999). The terms "executing … digital data" and "execution … of digital data" in

claims 1, 10, and 18 is used by the claim to mean, based on applicant's arguments in

their appeal brief, "reading out of a buffer a series of frames/images/etc. from a buffer

and displaying those frames/images/etc. in a continuous loop which loop may be

interrupted to read out a second, related series of frames/images/etc. from a buffer and

displaying them followed by returning to the main loop", while the accepted meaning of

the term "execute" is "To perform one or more instructions. In programming, execution

implies loading the machine language code of the program into memory and then

performing the instructions (Microsoft Press, Computer Dictionary, 2nd edition, 1993)."

The term is indefinite because the specification does not clearly redefine the term.

8.   One does not **execute** digital data unless that digital data is a computer

instruction.

9.   Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite

for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention.

10.   It seems to make no sense as written.

11.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by
> another filed in the United States before the invention by the applicant for patent or (2) a patent
> granted on an application for patent by another filed in the United States before the invention by the
> applicant for patent, except that an international application filed under the treaty defined in section
> 351(a) shall have the effects for purposes of this subsection of an application filed in the United States
> only if the international application designated the United States and was published under Article 21(2)
> of such treaty in the English language.

12.   Claims 1-2, 4-11, 13-22 are rejected under 35 U.S.C. 102(b) as being clearly

anticipated by Masuyama et al. (Publication No. 2004/0029640).

13.   Due to the arguments presented in applicant's appeal brief the examiner will

explain how he arrived at his interpretation of applicants' claim language, "executing ...

digital data" and similar claim language, in independent claims 1, 10, and 18. In

paragraph [0047] of the PGPUB version of applicant's specification applicant describes
interruption of the execution of the main sequence followed by execution of the
subsequence in the following language. "The sensing unit 140, to which the input
means of the input interface are connected, is adapted to sense or register the
activation of a certain input means. When the activation is sensed, execution of a main
sequence of digital data or digital instructions may be interrupted. The digital data of
the main sequence may comprise a background animation, i.e. a series of consecutive
digital images which will provide a moving picture when displayed. Alternatively, the
digital data of the main sequence may comprise audio data. When the execution of the
data of the main sequence is interrupted, a sub sequence comprising digital data or
instructions associated with the main sequence are executed or rendered." Since, as
the examiner made clear, *supra*, digital data other than instructions cannot be executed,
the examiner took the language, "execution of a main sequence of digital data or digital
instructions may be interrupted", to be an acknowledgement by applicants of the fact
that they were seeking coverage for execution of a main sequence of instructions
involved in ultimately rendering digital data into screen images (or sounds) and that
when talking about executing digital data applicant meant instructions. The examiner
took the language, "a sub sequence comprising digital data or instructions associated
with the main sequence are executed or rendered" to be further confirmation of the
examiner's interpretation of applicant's claim language since, though the order of the
verbs is reversed, it would be appropriate English language usage to "execute"
instructions and "render" digital data into screen images. The examiner concluded that

in light of applicant's specification applicant's claim language had an interpretation

consistent with the commonly accepted meaning for the language, "executing ... digital

data".

14.   The examiner, in support of his rejection suggested applicant read paragraphs

[0098] – [0101], [0156], and [0217] - [0245] and carefully review Figs. 3, 37, and 60-66,

at a minimum, before responding. The examiner also noted that he considered the

substance of claim 7 to be inherent in Masuyama's teaching of interrupts. Without such

data a computer cannot branch to an appropriate place in the subsequence or return to

an appropriate place in the main sequence.

15.   Applicant's basic argument in support of claims 1-2, 4-11, 13-22 and, in

particular, their independent claims is that "nowhere ... does MASUYAMA et al. disclose

or suggest interrupting execution of a main sequence of digital data in response to

sensing (activation of at least one input means during execution of the main sequence),

and initiating and executing at least one sub sequence of digital data when execution of

the main sequence is interrupted". It is clear from applicant's arguments that they have

also interpreted their claim language to mean that the interrupt must result in the

immediate display of digital data. Applicant's claim language, as the examiner

interpreted it consistent with what one of ordinary skill would understand and applicant's

specification (i.e., instructions are the digital data being executed), does not require any

immediate display of digital data. It merely requires an interrupt subroutine be

executed, which is done. And, while a new display and/or sounds would ultimately

result (related to)/(associated with) values passed in the communication interrupt

process there is no requirement that the display or sound be part of the interrupt sub-routine.

16.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

17.   Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Masuyama et al. (Publication No. 2004/0029640).

18.   Masuyama taught the invention of claim 10 from which claim 12 depends as well as interrupts (Figs. 62 and 65-66). Okada's system also taught counting iterations of a given activity such as a loop (paragraph [0156] and Fig. 37). The examiner also takes Official Notice of the fact that timer/counter based interrupts are well known in the art. These are such a basic programming tools. Also, interrupts are merely a change of program flow device that can be used as a system manufacturer's design requires. Application of basic tools like timers/counters, loops, and interrupts is merely a straightforward matter for one of ordinary skill and does not rise to the level of patentable differentiation.

19.   The examiner is notifying applicants that in the absence of a timely traversal of the examiner's Official Notice that "timer/counter based interrupts are well known in the art. These are such basic programming tools. Also, interrupts are merely a change of program flow device that can be used as a system manufacturer's design requires", is now admitted prior art. See MPEP 2144.03 C.

20.   Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Masuyama et al. (Publication No. 2004/0029640) in view of Mankovitz (WO 98/48566).

21.   Masuyama taught the invention of claim 1 from which claim 3 depends.

Masuyama also taught interrupting and pausing of the main sequence to execute the

subsequence followed by resuming execution of the main sequence when execution of

the subsequence is ended (Figs. 62 and 65-66). Okada did not teach setting a resume

flag at a position of the main sequence where its execution is interrupted; and when the

execution of the sub sequence is ended resuming execution of the main sequence at

said position.

22.   However, Mankovitz taught setting a resume flag at a position of the main

sequence where its execution is interrupted; and when the execution of the sub

sequence is ended resuming execution of the main sequence at said position (p. 7, line

19 through p. 8, line 14 and p. 9, line 16-27). One of ordinary skill in the art would be

motivated to apply Mankovitz's specific teachings of how one interrupts and pauses the

main sequence to execute the subsequence followed by resuming execution of the

main sequence when execution of the subsequence is ended, because it represents a

known method of handling the stated task which involves image and audio data and

which Masuyama left to the skill of one of ordinary skill to implement.

23.   MPEP 2141 reads, in part, as follows:

The Supreme Court in *KSR* reaffirmed the familiar framework for determining
obviousness as set forth in *Graham v. John Deere Co.* (383 U.S. 1, 148 USPQ 459
(1966)), but stated that the Federal Circuit had erred by applying the teaching-
suggestion-motivation (TSM) test in an overly rigid and formalistic way. *KSR*, 550 U.S.
at, 82 USPQ2d at 1391. Specifically, the Supreme Court stated that the Federal Circuit
had erred in four ways: (1) "by holding that courts and patent examiners should look

only to the problem the patentee was trying to solve" (*Id.* at__ 82 USPQ2d at 1397); (2) by assuming "that a person of ordinary skill attempting to solve a problem will be led only to those elements of prior art designed to solve the same problem" (*Id.*); (3) by concluding "that a patent claim cannot be proved obvious merely by showing that the combination of elements was obvious to try'" (*Id.*); and (4) by overemphasizing "the risk of courts and patent examiners falling prey to hindsight bias" and as a result applying "[r]igid preventative rules that deny factfinders recourse to common sense" (*Id.*).

In *KSR*, the Supreme Court particularly emphasized "the need for caution in granting a patent based on the combination of elements found in the prior art," *Id*, at__ 82 USPQ2d at 1395, and discussed circumstances in which a patent might be determined to be obvious. Importantly, the Supreme Court reaffirmed principles based on its precedent that "the combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results. "*Id*, at__ 82 USPQ2d at 1395.

24.   The Supreme Court further stated that:

> When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability. For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his ordinary skill. *Id.* at__ 82 USPQ2d at 1396. When considering obviousness of a combination of known elements, the operative question is thus "whether the improvement is more than the predictable use of prior art elements according to their established functions." *Id.* at__ 82 USPQ2d at 1396.

25.   All the elements necessary to produce applicants' invention were known in the art. How one combined such elements to produce applicants' invention was also known in the art. Evidence of this is that applicants' disclosure lacks any detailed description of novel circuitry or novel code necessary to implement applicants' invention. One of ordinary skill would have readily recognized that the results of the combination were predictable. Absent some secondary considerations, not in evidence at this time, applicants invention is obvious over the combination of prior art presented.

26.   It is clear that applicant's representative and the examiner have reached very

different conclusions as to the applicability of the prior art of record based on very

different interpretations of applicant's claim language. Possibly, the misunderstanding

may have resulted when someone, who has a very good command of English but who

does not appreciate all the nuances of computer-related, English-language, terminology

either wrote or translated the original document. The examiner would suggest

applicant's representative contact him in the future before appealing if, in the judgment

of applicant's representative, the art has little relevance to the claims. It may expedite

prosecution. However, lest applicant conclude that merely refining claim language will

distinguish over the prior art and thereby waste more of applicant's time, the examiner

will also apply art relevant to applicant's interpretation of his claims.

27.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

28.   Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Linnett et al. (Patent No. 5,682,469) in view of Crawford (The Windows XP Search

Companion …).

29.   Linnett taught the invention of exemplary claim 1, substantially as claimed,

including: a method for executing a first and a second sequence of digital data in an

electronic device (10) configured to render the digital data on a display (16), the

electronic device (10) having an input interface comprising at least one input means

(14,18), the method comprising: initiating and executing a main sequence of digital data;

sensing activation of at least one input means during execution of the main sequence;

interrupting execution of said main sequence in response to said sensing; and initiating

and executing at least one sub sequence of digital data when execution of the main

sequence is interrupted, said sub sequence being associated with said main sequence.

30.   Col. 5, lines 38-45; col. 6, lines 9-63; col. 7, lines 5-55; col. 9, line 62 through col.

10, line 46; and col. 13, lines 9-22 describe how one creates, stores, activates, etc.

animation sequences such as "Rover" the file search dog (Figs. 7 and 8) Microsoft uses

in its operating systems. Crawford makes clear rover has been around since, at least,

9/3/2001. Anyone with a PC with a 2001 or later Microsoft operating system and who

has had occasion to search for files on their PC has seen Rover in action. Activation of

the file search function for files or folders activates Rover who sits there blinking his

eyes and wagging his tail in what could be termed a main animation sequence of digital

data. When an actual search request is entered, this interrupts the sitting, wagging,

blinking, main sequence, and a sniffing-the-ground-searching-for-a-bone sequence of

digital data is activated and runs until the files have been searched and Rover returns to

his sitting, wagging, blinking, main sequence. These actions of Rover meet the broad

claim language of applicant's claims.

31.   As to claim 2, both sequences are digital data.

32.   As to claim 3, while the examiner has discussed the actions of Rover as an

example, the cited sections of Linnett make clear many other animation sequences are

possible such as pacing back and forth and jumping up and down (col. 6, lines 24-29).

In that one of the goals of Linnett's system is to make the animation sequences play properly and smoothly (col. 10, lines 9-14) Linnett would not want, for example, a dog to pace to the left-hand-side of the screen, jump up and down there, and then begin pacing again on the right-hand-side of the screen. Inherently, there would have to be a way for the system to know where the dog was when it stopped pacing and began jumping up and down to provide conceptually correct execution. The examiner takes Official Notice of the fact that a traditional way to interrupt an execution sequence is to store the position in a first execution sequence one wants to return to (i.e., a flag for the computer system) and once the second execution sequence has been executed the computer returns to point in the first execution sequence denoted by the position/flag.

33.   As to claim 4, Linnett taught this (col. 10, lines 9-16).

34.   As to claim 5, Linnett taught this (col. 13, lines 9-22).

35.   As to claim 6, Linnett taught this (col. 13, lines 9-22).

36.   As to claim 7, this seems to be a reference to atomic execution of a command in a sequence before an interrupt is taken. The examiner takes Official Notice of the fact that atomic execution was known at the time of applicant's invention.

37.   As to claim 8, since there is no limitation as to what rendering constitutes and when it takes place, col. 6, lines 9-29 and col. 3, lines 5-55 can be seen as meeting this limitation.

38.   As to claim 9, the secondary storage could be considered external to the basic system of Fig. 10 doing the calculations, display, etc. Applicant fails to place any limitation on what constitutes an electronic device or what it is external to. The term,

"electronic device", is so vague that by just drawing different boxes around the various components of the system of Fig. 10 or adding a modem, etc. one could meet the limitations of claim 9.

39.   As to claim 10, the various units would be components of the cpu and/or the operating system of Linnett's system.

40.   As to claim 11, it fails to teach or define over rejected claims 1-10.

41.   As to claim 12, the examiner is notifying applicants that in the absence of a timely traversal of the examiner's Official Notice that "timer/counter based interrupts are well known in the art. These are such basic programming tools. Also, interrupts are merely a change of program flow device that can be used as a system manufacturer's design requires", is now admitted prior art. See MPEP 2144.03 C. Application of basic tools like timers/counters, loops, and interrupts is merely a straightforward matter for one of ordinary skill and does not rise to the level of patentable differentiation.

42.   As to claim 13, it fails to teach or define over rejected claims 1-12.

43.   As to claim 15, Linnett taught transmission of the saved parts to the display device (col. 9, line 61 through col. 10, line 46). Given the capabilities of a Microsoft operating system and relevant PC transmission to other devices would also be blatantly self-evident to one of ordinary skill.

44.   As to claim 16 and 17, Microsoft was making operating systems for such devices at the time of applicant's invention. It would be self-evident to one of ordinary skill that Rover could be implemented in the Windows Mobile operating system (col. 3, lines 20-34).

45.   As to claims 18-20, they fail to teach or define over rejected claims 1-17.

46.   As to claims 21-22, Linnett taught appropriate audio functionality (col. 7, lines 23-41 and col. 13, lines 9-22).

47.   Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

48.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

49.   Reiser (Patent No. 4,928,084) would readily provide an obviousness-based rejection of applicant's broad independent claims and some of their dependent claims though the examiner has chosen not to burden applicant with too many art rejections at this time.

50.   The article entitled "Windows Mobile" documents some of the history of the Microsoft operating systems developed for smart phones, PDAs, etc.

51.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

52.   Any inquiry concerning this communication should be directed to William M.

Treat at telephone number (571) 272-4175.

53.   Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

/William M. Treat/
Primary Examiner, Art Unit 2181